

SCIENTIFIC NOTE

**MYIASIS IN BRISTLE-SPINED PORCUPINE,
CHAETOMYS SUBSPINOSUS (OLFERS, 1818),
IN BAHIA, BRAZIL¹**Adriana Akemi Kuniy² and Caroline Nascimento Santos²

Two specimens of *Chaetomys subspinosus* (Olfers, 1818) (Rodentia, Echimyidae, Chaetomyinae) infested by screwworm *Cochliomyia hominivorax* (Coquerel, 1858) (Diptera: Calliphoridae) were captured in an Atlantic Forest fragment at Salvador, northeastern Brazil, on March 24 and April 12, 2003. One of them had parasite infestation on the left of its face, between its ear and buccal cavity (Fig. 1); the other one had 70 percent tail infestation. The specimens were brought to a Wild Animal Rehabilitation Center due to screwworm infestation located in the body of the animals and were treated with chemical products (clorpirifos, diclorvos), before their translocation to a permanent place in reserve. Despite this procedure, none of them survived treatment more than one day. *Cochliomyia hominivorax* is an ectoparasite usually found in skin and mucous secretion during its larval phases. This screwworm develops in live tissues of their hosts in only one lesion considered relatively large, with repulsive secretion (Koller et al., 2002). *Cochliomyia hominivorax* has been reported in humans (Duque et al., 1990; Leclercq 1990; Mehr et al., 1991; Boulard and Quiroz 1991; Kron, 1992) and in domestic mammals, such as cattle (Sanavria et al., 1996; Moya Borja et al., 1993), sheep, pigs, goats, mules, donkeys, dogs, and cats (Rawlings and Cheng Sang 1984; Costa et al., 1985; Amarante et al., 1992; Mariluis et al., 1994). It also can be found in Brazilian sylvan mammals, like the porcupine (*Coendou prehensilis prehensilis*) (Lacey and George 1981). This is the first record of an infestation by *Cochliomyia hominivorax* in *Cochliomyia subspinosus* porcupines.

ACKNOWLEDGMENTS

We are grateful to Mr. Marco Túlio R. Brasileiro and MSc Adriana Lampert who identified the parasite, to Dr. Mário de Vivo that encouraged this paper, and MSc Cristiane Villaça and Mr. Guilherme Barco for their comments and review.

LITERATURE CITED

- Amarante, A. F. T., M. A. Barbosa, T. C. Oliveira-Siqueira, and S. Fernandes. 1992. Epidemiology of sheep myiasis in São Paulo, Brazil. Tropical Animal Health and Production 24(1): 36-39.

¹ Received on August 12, 2004. Accepted on August 13, 2004.

² JGP Consultoria e Participações Ltda.R. Américo Brasiliense, 615, 04715-003, SP, Brazil. E-mails: araradri@ig.com.br; caledog@bol.com.br, respectively.



Fig. 1.
Cochliomyia subspinosus porcupine infested by
Cochliomyia hominivorax screw-worms. Note
lesions on left side
of the face,
between its ear and
buccal cavity.

Boulard, C. and H. Quiroz. 1991. Cutaneous myiasis: recent advances in biology, immunology and improvements of control measures. Annales de Parasitologie Humaine et Comparee 66 (Supplement 1):52-57.

Costa, A. F. and L. S. Vieira. 1985. Permanent ectoparasites of goats and sheep in Sobral, Ceará, Brazil. Pesquisa Agropecuária Brasileira 19(5):639-646.

Duque, C., G. Marrugo, and R. Valderrama. 1990. Otolaryngic manifestation of myiasis. Ear Nose & Throat Journal 69(9):619-622.

Koller, W. W., C. J. B. Carvalho, and A. Gomes. 2002. Dipteros sinantrópicos em área de transição entre o Pantanal e o Cerrado brasileiro. Dados preliminares. In: Congresso Brasileiro de Parasitologia Veterinária, 12, I. Rio de Janeiro, 2002. Programas e Resumos. Rio de Janeiro, Brazil. CBPV/UFRRJ/PJ Eventos, R386.pdf (CD-ROM).

Kron, M. A. 1992. Human infestation with *Cochliomyia hominivorax*, the New World screwworm. Journal of the American Academy of Dermatology 27(2, part 1):264-265.

Lacey, L. A. and T. K. George. 1980. Myiasis in an Amazonian Porcupine. Entomological News 92(2):79-80.

Leclercq, M. 1990. Import of animal and human tropical myiasis by *Cochliomyia hominivorax* in Libya (Diptera: Calliphoridae). Revue Medicale de Liege 45(9):452-457.

Marilius, J. C., J. A. Schnack, I. Cerverizzo, and C. Quintana. 1994. *Cochliomyia hominivorax* (Coquerel, 1858) and *Phaenicia sericata* (Meigen, 1826) Parasiting Domestic animals in Buenos Aires and Vicinities (Diptera, Calliphoridae). Memorias. Instituto Oswaldo Cruz (Rio de Janeiro, Brazil) 89(2):139.

Mehr, Z., N. R. Powers, and K. A. Konkol. 1991. Myiasis in a wounded soldier returning from Panama. Journal of Medical Entomology 28(4):553-554.

Moya-Borja, G. E., C. M. B. Oliveira, R. A. Muniz, and L. C. B. Gonçalves. 1993. Phophylactic and persistent efficacy of Doramectin against *Cochliomyia hominivorax* in cattle. Veterinary Parasitology 49 (1): 95-105.

Rawlins, S. C. and Chen Sang. 1984. Screwworm myiasis in Jamaica and proposals for its eradication. Tropical Pest Management 30(2):125-129.

Sanavria, A., R. A. Muniz, L. C. B. Gonçalves, R. S. Rew, and D. S. F. Silva. 1996. Prophylactic efficacy of Doramectin against natural infections of *Cochliomyia hominivorax* (Coquerel, 1858) on castrated cattle. Revista Brasileira de Parasitologia Veterinária 5(1):7-10.